

Notice of Allowability

Application No.

10/799,323

Applicant(s)

KIM ET AL.

Examiner

Art Unit

LaTanya Bibbins

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 22 March 2007.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-6 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Regarding claims 1-6, none of the references of record, alone or in combination, suggest or fairly teach **"a first output unit, which outputs a frame synchronization signal in response to the internal frame synchronization signal and the second valid synchronization signal, wherein the main frame synchronization signal generator stops generating the first insertion synchronization signal in response to the second valid synchronization signal, and detects and outputs the first valid synchronization signal as the internal frame synchronization signal"** in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of Relevant Prior Art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's Admitted Prior Art clearly discloses an apparatus, which detects a frame synchronization signal from a digital data signal reproduced from an optical disc, the apparatus comprising: a synchronization signal detector, which detects and outputs a synchronization signal from the digital data signal; a main frame synchronization signal generator, which detects and outputs a first valid synchronization signal from the synchronization signal, and generates and outputs a first insertion synchronization signal if the first valid synchronization signal is not detected during a predetermined first time period (see Figure 2).

Although **Yamamoto et al. (US Patent Number 6,577,569 B1)** teaches an apparatus which detects a frame synchronization signal from a digital data signal reproduced from an optical disc (see Figure 1), the apparatus comprising: a synchronization signal detector, which detects and outputs a synchronization signal from the digital data signal (see Figure 1 element 6); and a main frame synchronization signal generator (see Figure 1 elements 71, 72, 80, and 81), which detects and outputs a first valid synchronization signal from the synchronization signal as an internal frame synchronization signal, and generates and outputs a first insertion synchronization signal as the internal frame synchronization signal, if the first valid synchronization signal is not detected during a predetermined first time period (see the description of the synchronization signal generation in column 4 lines 63-67 and further in column 5 lines 1-43); Yamato fails to disclose a sub frame synchronization signal generator. Specifically one which detects and outputs a second valid synchronization signal from

the synchronization signal while the main frame synchronization signal generator generates the first insertion synchronization signal.

Shimizume et al. (US Patent Number 4,797,192) teaches an apparatus which detects a frame synchronization signal from a digital data signal reproduced from an optical disc (Figure 3), the apparatus comprising: a synchronization signal detector, which detects and outputs a synchronization signal from the digital data signal (see Figure 3 element 34) and a main frame synchronization signal generator, which detects and outputs a first valid synchronization signal from the synchronization signal as an internal frame synchronization signal (see the signal MSYNC in Figure 3), and generates and outputs a first insertion synchronization signal as the internal frame synchronization signal, if the first valid synchronization signal is not detected during a predetermined first time period (see the ISYNC signal in Figure 3). Shimizume, however, fails to teach disclose a sub frame synchronization signal generator. Specifically one which detects and outputs a second valid synchronization signal from the synchronization signal while the main frame synchronization signal generator generates the first insertion synchronization signal.

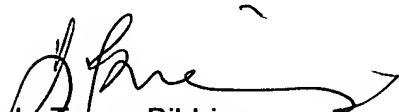
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571) 270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LaTanya Bibbins



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER